

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/507,239	MEISSNER ET AL.	
	Examiner	Art Unit	
	Charanjit S. Aulakh	1625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>2 pages</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>5/17/06</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other ____.</li> </ol> |
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### DETAILED ACTION

1. Claims 1-41 are pending in the application.

#### *Election/Restrictions*

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6 and 17, drawn to compounds of formula (I) where R3 represents C1-4 alkyl group.

Group II, claim(s) 1-20, drawn to compounds of formula (I) where R3 represents (CH<sub>2</sub>)<sub>n</sub>-cycloheteroalkyl or (CH<sub>2</sub>)<sub>n</sub>-aryl.

Group III, claim(s) 21-26, 31 and 35-41, drawn to modulation of function mediated by androgen receptor or treating diseases conditions caused by androgen deficiency using compounds of formula (I) alone or pharmaceutical compositions containing compounds of formula (I) alone.

Group IV, claim(s) 27-30 and 32-34, drawn to A method of treating osteoporosis using compounds of formula (I) in combination with other drugs or pharmaceutical compositions comprising compounds of formula (I) in combination with other drugs.

3. The inventions listed as Groups I, II, III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

In regard to groups I and II, there is no common core which in the Markush Practice, is a significant structural element shared by all of the alternatives; see PCT Administrative Instructions Annex B Part I (f) (i) (B) (1). In regard to groups III and IV, these groups are directed to treating various disease conditions using compounds of formula I alone or in combination with hundreds of other drugs and therefore, are a combination of different categories of claims; see PCT Administrative Instructions Annex B part I (d) (i).

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4. During a telephone conversation with the applicant's attorney, Ms. Patricia A. Shatynski on May 17, 2006, a provisional election was made with traverse to prosecute the invention of group II, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### EXAMINER'S AMENDMENT

6. The following amendment is pursuant to a telephone conversation with the applicant's attorney, Ms. Patricia A. Shatynski on May 17, 2006. The following changes have been made in claims:

Cancel claims 21-41 directed to non-elected groups without prejudice to the filing of a divisional application.

In claim 1, for the value of variable R3, delete ----C1-4 alkyl ---- to delete non-elected subject matter and furthermore, for the definition of an aryl group for variable R3, line 17 on page 76, value (3), after benzimidazolyl, insert ----or imidazopyridin----- which value

is disclosed in compound 50 ( see table 1 on page 60 ) as well as compound disclosed on page 17 ( see line 31 ).

In claim 3, for the value of variable R3, after R3 is, delete ----selected from C1-4 alkyl, and ----- to delete non-elected subject matter.

In claim 12, insert claim 12 in a new line under claim 11 instead of immediately after end of claim 11.

In claim 17, delete ---- first compound in lines 18-19 on page 81 -----to delete non-elected subject matter.

#### REASONS FOR ALLOWANCE

7. The following is an examiner's statement of reasons for allowance:

Claims 1-20 are allowed since the instant compounds of formula (I) are neither disclosed nor obvious over the prior art. In the prior art, Rasmusson ( J. Med. Chem., cited on applicants form 1449 ) discloses compound 29 ( see table III on page 2301 ) which is closely related to instant compounds. However, the compound of Rasmusson differs from the instant compounds in having variable R3 as an alkyl group instead of (CH<sub>2</sub>)<sub>n</sub>-cycloheteroalkyl or (CH<sub>2</sub>)<sub>n</sub>-aryl group and furthermore, there is no suggestion, teaching or motivation in the prior art to modify the compounds of Rasmusson to prepare the instant compounds.

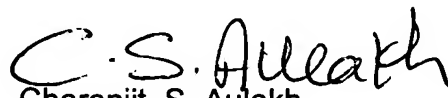
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charanjit S. Aulakh whose telephone number is (571)272-0678. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on (571)272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Charanjit S. Aulakh  
Primary Examiner  
Art Unit 1625